

This listing of claims will replace all prior versions, and listings, or claims in the application.

Listing of the Claims:

Claims 1-10 (cancelled)

11. (Currently amended) A method for the preparation of a cross-linked hydrophilic coating of a hydrophilic polymer on a substrate polymer surface of a medical device, said method comprising the steps of:

(i) providing a medical device having a substrate polymer surface;

(ii) providing a polymer solution comprising 1-20% by weight of a hydrophilic polymer, 0-5% by weight of additive(s), and the balance of said solution being ~~is comprised of~~ a vehicle having at least one plasticizer with a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20;

(iii) applying said polymer solution to said substrate polymer surface;

(iv) evaporating at least a part of the vehicle from said polymer solution present on said substrate polymer surface at a temperature of 25°-100°C; and

(v) curing said hydrophilic polymer without rewetting the medical device, wherein said curing occurs by irradiation and is the only irradiation step in the process.

12. (Currently amended) The method according to claim 11, wherein the polymer solution is applied to said substrate polymer surface in ~~one~~ a single application step.

13. (Previously presented) The method according to claim 11, wherein the vehicle comprises at least one solvent.

14. (Previously presented) The method according to claim 13, wherein the polymer solution consists of 1-20% by weight of the hydrophilic polymer, 0-5% by weight of additive(s), 1-40% by weight of plasticizer(s), and 50-95% by weight of solvent(s).

15. (Previously presented) The method according to claim 11, wherein the substrate polymer is polyurethane.

16. (Previously presented) The method according to claim 11, wherein the hydrophilic polymer is polyvinyl pyrrolidone.

17. (Previously presented) A medical device comprising a substrate polymer surface having thereon a cross-linked hydrophilic coating of a hydrophilic polymer, said medical device being obtained by the method of claim 11.

18. (Previously presented) A medical device comprising a hydrophilic coating of a cross-linked hydrophilic polymer, said coating comprising a hydrophilic plasticizer having a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20.

19. (Previously presented) A medical device comprising a hydrophilic coating of a cross-linked hydrophilic polymer, said coating having a hydrophilic plasticizer with a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20, said medical device being prepared according to the method of claim 11.

20. (Currently amended) A method of use of a polymer solution for the preparation of a cross-linked hydrophilic coating, wherein said polymer solution includes 1-20% by weight of a hydrophilic polymer, 0-5% by weight of additive(s), and the balance of said solution being ~~is~~ a vehicle having a plasticizing effect on the hydrophilic polymer and including at least one plasticizer having a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20, said method comprising the steps of:

(a) applying said polymer solution to said substrate polymer surface;

(b) evaporating at least a part of the vehicle from said polymer solution present on said substrate polymer surface at a temperature of 25°-100°C; and curing said hydrophilic polymer by irradiation without rewetting the medical device,

wherein said method includes only a single irradiation step.

21. (Previously presented) The method according to claim 15, wherein the hydrophilic polymer is polyvinyl pyrrolidone.

22. (Currently amended) A method for the preparation of a cross-linked hydrophilic coating of a hydrophilic polymer on a substrate polymer surface of a medical device, said method consisting of the steps of:

(i) providing a medical device having a substrate polymer surface;

(ii) providing a polymer solution having 1-20% by weight of a hydrophilic polymer, 0-5% by weight of additive(s), and the balance of said solution being a vehicle having at least one plasticizer with a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20;

(iii) applying said polymer solution to said substrate polymer surface;

(iv) evaporating at least a part of the vehicle from said polymer solution present on said substrate polymer surface at a temperature of 25°-100°C; and

(v) curing said hydrophilic polymer.

23. (Previously presented) The method according to claim 22, wherein the polymer solution is applied to said substrate polymer surface in one single application step.

24. (Previously presented) The method according to claim 22, wherein the vehicle comprises at least one solvent.

25. (Previously presented) The method according to claim 24, wherein the polymer solution consists of 1-20% by weight of the hydrophilic polymer, 0-5% by weight of additive(s), 1-40% by weight of plasticizer(s), and 50-95% by weight of solvent(s).

26. (Previously presented) The method according to claim 22, wherein the substrate polymer is polyurethane.

27. (Previously presented) The method according to claim 22, wherein the hydrophilic polymer is polyvinyl pyrrolidone.

28. (Previously presented) A medical device comprising a substrate polymer surface having thereon a cross-linked hydrophilic coating of a hydrophilic polymer, said medical device being obtained by the method of claim 22.

29. (Previously presented) A medical device comprising a hydrophilic coating of a cross-linked hydrophilic polymer, said

coating having a hydrophilic plasticizer with a solubility in water of at least 6 g/L, a boiling point above 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20, said medical device being prepared according to the method of claim 22.

30. (Currently amended) A method of use of a polymer solution for the preparation of a cross-linked hydrophilic coating, wherein said polymer solution includes 1-20% by weight of a hydrophilic polymer, 0-5% by weight of additive(s), and the balance of said solution being ~~is~~ a vehicle having a plasticizing effect on the hydrophilic polymer and including at least one plasticizer having a solubility in water of at least 6 g/L, a boiling point ~~above~~ 210°C at 760 mmHg, and a Hansen δ_H parameter of less than 20, said method consisting of the steps of:

(a) applying said polymer solution to said substrate polymer surface;

(b) evaporating at least a part of the vehicle from said polymer solution present on said substrate polymer surface at a temperature of 25°-100°C; and curing said hydrophilic polymer by irradiation,

wherein said method includes only a single irradiation step.

31. (Previously presented) The method according to claim 26, wherein the hydrophilic polymer is polyvinyl pyrrolidone.

32. (New) The method according to claim 11, wherein evaporating at least part of said vehicle takes place at a temperature of 70°-100°C.

33. (New) The method according to claim 20, wherein evaporating at least part of said vehicle takes place at a temperature of 70°-100°C.

34. (New) The method according to claim 22, wherein evaporating at least part of said vehicle takes place at a temperature of 70°-100°C.

35. (New) The method according to claim 30, wherein evaporating at least part of said vehicle takes place at a temperature of 70°-100°C.